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CONVENTION PROCEEDINGS

Report of the Michigan State Convention.

BY W. Z. HUTCHINSON.

The Michigan State Bee-Keepers' Association met in annual convention Dec. 30 and 31, 1898, in Woodman's Hall, at Reed City. For several years this convention has not been a great success in point of numbers. When a man gets little or no honey, he has no money with which to attend conventions. This time the convention went into the heart of the willow-herb district, where the bee-keepers get honey, if any one does, and there was really quite a respectable crowd. Altho there was no set program, the proceedings were of interest and profitable. This plan was not adopted because any one thought that it possessed any special merit, but because the secretary was too busy to get up the program. If there is the right kind of a president in the chair, as there happened to be this time, this plan is all right. Another thing, it is now three months since the convention met, and the secretary is now writing up the proceedings. I think that the Michigan convention better choose some other man for secretary—one who can give more time to the work.

But to return: Slips of paper were past around, and the members asked to write questions and pass them up to the president, who read them and selected one for discussion. When one topic was thoroly discust, another was taken up.

THE MATING OF QUEENS.

T. F. Bingham—Other things being equal, is an Italian queen more likely to mate with an Italian drone than with a black drone?

J. M. Rankin—We have been trying at the Agricultural College to breed for length of tongue in the bees, and, of course, we wisht the queens to mate with Italian drones, and we succeeded. I think that there is no difference as to the likelihood of a queen mating with a black drone or an Italian drone, that is, other things being equal.

Mr. Bingham—I have noticed that it is difficult to keep Italians pure. Three years ago my bees were all pure Italians, now they are mixt.

W. Z. Hutchinson—When I began bee-keeping I had black bees, and all of the bees in my neighborhood were black bees, with the exception of a few colonies of Italians that were a mile and a half from my place. It was a sort of a puzzle to me that one-half of my queens should mate with these distant drones, when there were so many black drones right in the yard. Later, I read the views of some of the leading bee-keepers that queens or drones, or both, had a disposition to fly far from home when mating. It

seemed a provision of Nature to prevent in-and-in breeding. When I began rearing queens for sale I found that I must get rid of all black drones in my neighborhood, but it was not until I had Italianized all of the bees within about three miles of my apiary that I finally succeeded in getting all of the young queens purely mated. With all of the bees Italians within three miles there were *none* of the queens mated, and there was no trouble in keeping my bees pure Italians. People say that Italians will "run out," and go back to the black blood, so to speak, but this isn't true. If an Italian apiary is surrounded by black bees nothing is more certain than that these Italians will eventually be superseded by hybrids. The same thing would occur if a man should start an apiary of blacks in a neighborhood filled with Italian bees. Mr. Aspinwall restrained the



A. C. Sanford—(See page 250.)

queens in their disposition to roam by cutting from 1/16 to 1/8 of an inch from each wing, and the result was that almost all of them were mated by Italian drones, while black bees were in the vicinity.

Mr. Rankin—I think that a caution ought to be given in regard to this clipping. At the college we clipped 62 queens, and only three or four of them were mated. One of those

that mated was clipped only the 32nd of an inch, and one was clipped as much as $\frac{1}{4}$ the length of the wing.

PLAIN SECTIONS AND FENCE SEPARATORS.

L. C. Woodman—I have used 100 cases of plain sections. The season was poor, but I cannot say very much either for or against them. The fences are expensive, and the bees glue them up considerably.

Mr. Powers—I have used both styles of sections. The sections of the plain style are better filled. The separators are just as easily cleaned.

H. G. Gifford—When plain sections are used we get heavier combs and less pop-holes, and there is a saving in shipping-cases.

H. S. Collingwood—I want plain sections, but not fence separators. I want slats on the separators, so that I can use plain sections, but I do not want any fence separators. Here he showed a fence separator in which most of the cracks were filled with propolis.

Mr. Bingham called attention to the fact that most of the openings were too narrow.

Mr. Hilton called attention to the fact that the separator had been used at the outside of the super where the bees could not get behind it, and that and the narrowness of the openings accounted for the great quantities of propolis that had been used. He said that the A. I. Root Co. acknowledged that some of the first fences that they sent out had too narrow spaces. The fear of "washboardy" had led them to make the spaces as narrow as they had. This fault has been remedied.

Mr. Bingham—There is no question that the use of plain sections allows of a saving in shipping-cases, but there are other considerations. Here is one: With tight or closed separators the bees will begin upon only a few sections in the center of the super, and if the flow is slow, or if it is near the close of the harvest, they will keep on and finish up those few sections that they have begun working upon, when, with no separators, they are more inclined to spread out and begin work upon a large number of sections, and perhaps not finish any of them. With tight separators there will be less unfinished sections than with no separators, and it seems as if open separators might have a tendency in the way of encouraging the bees to spread out and begin work upon more sections than they can finish.

Mr. Hutchinson—I was over to the convention of the Ontario bee-keepers last December, and Mr. Jacob Alpaugh, who has had much experience in comb-honey production, took the same view as that advanced by Mr. Bingham, viz.: that separators have a tendency to keep the bees from spreading out and beginning more work than they will finish. That is, they seem to look upon each compartment between the separators as separate from the rest of the super, as independent in itself, and are more inclined to finish up work that is begun than to spread out and begin more work. In other words, tight separators seem to have a tendency to cause the bees to concentrate their efforts.

Mr. Bingham—Perhaps some of you may remember the Betsinger separator. It was made of coarse wire-cloth. The openings were large enough so that a bee could pass thru. If these openings had been too large I suppose that the bees would have made little warts upon the surface of the comb. The Roots have been very careful in this matter of plain sections and fence separators. They are working slowly as they did with the deep-cell foundation. They are not crowding these things. Fence separators may yet be thrown entirely out of the market.

Mr. Rankin—At the college we gave the plain sections and fence separators a trial. We filled one-half of a super with plain sections and fence separators, and the other half with old-style sections and old-style separators. The plain sections were better filled around the edges.

Mr. Bingham—When we see how easy it is for a firm like the Roots to make a mistake, we'd better be careful how we adopt anything about which there is even an opportunity for making a mistake.

NEEDED FOUL BROOD LEGISLATION.

The secretary read a paper from Mr. A. D. D. Wood, of Lansing, which went to show the difficulty of doing anything in the way of suppressing foul brood so long as there was no better law upon the subject. At the time the old law was past it was supposed that the only possible thing to do with a colony affected with foul brood was to burn it up. We have since learned that it is possible to save the bees, to disinfect and use the hive, to boil the honey and to melt the combs into wax, and to thus get rid of the disease with but little loss except the labor. The trouble is that

many bee-keepers have only a few colonies, and are not specially interested in bees. They do not know anything about foul brood, and do not recognize it when it first appears, and would not know how to treat it if they did recognize it. It is neglected, and colonies become weak in numbers, are robbed, and the seeds of the disease are thus spread from colony to colony, and from apiary to apiary. There is scarcely a county in the Lower Peninsula that is free from this disease; and until there is someone who has the authority and skill to step in and help bee-keepers to crush it out, it will continue to spread. Over in Ontario this disease threatened to wipe out the industry of bee-keeping when an inspector of apiaries was appointed. He has now been at work several years, and the disease is fast disappearing from the Province. Wisconsin has followed in the steps of Canada, and now has a similar law and a most efficient inspector. Illinois and New York are also working to get a similar law. Colorado has a foul brood law. There is too much machinery about the old law. There is too much trouble to get it enforced. If it turns out that there is no foul brood where it was suspected, then the man who complained is shouldered with the expense of the examination. This fear of being called upon to bear the cost deters many from complaining that would otherwise make a complaint.

Mr. Rankin—This disease is certainly on the increase. In Sanilac county I found an entire apiary dead from foul brood.

Pres. Hilton—We need protection from foul brood. The old law was all right at one time, but now it is different. Many of you probably have never seen foul brood, and do not know what it is like, and I hope you never will. The brood dies and turns a dark brown, and it is stringy and ropy, and emits a disagreeable odor. Seeds of the disease get into the honey, and any of this honey carried to some other hive starts the disease there, and so it goes. Some of you may think that there is no foul brood near you, and that you will never need the law in your own personal case. This is something that you cannot be sure about. It may be nearer than you think. Even if it isn't the way to keep it away from you is to have it stamped out wherever it may be. If we as a body ask for this law, and show the legislature that it is really needed, it can be secured without a doubt.

Upon motion of Mr. Bingham, it was unanimously voted that Mr. Rankin be instructed to draft a bill similar to the Ontario or Wisconsin law, and secure its introduction to the Michigan legislature.

THE HEDDON HIVE AND MANAGEMENT.

D. R. Van Amburgh—With the Heddon hive I put on the sections when the bees are ready regardless of whether the hive is composed of one or of two cases. It is from the swarm that I get the honey. I give the supers to the swarm.

Mr. Hutchinson—My practice is the same as that of Mr. Van Amburgh. As soon as the bees are nicely at work in the first super, and it is half or two-thirds full of honey, that is, the sections have reached that stage of completion, I raise up the super and put another underneath. I fill all sections full of foundation. When the bees have made a good start in the second super, and honey is coming in at a good rate, I raise both supers and put another underneath. It must be remembered that the force of bees in the hive is rapidly increasing at this time of the year, and it does not take long for enough to hatch out to fill a super. By the time that it is advisable to add another super, if that time comes, it is likely that the top super will be ready to come off. If the bees are a little slow in completing the corner sections I would not leave the super on for them to be completed, but take it off and take out the unfinished sections in the corners. As soon as enough of these unfinished sections have accumulated to fill a super I fill one and put it upon some colony. I would not tier up supers more than three high. If a colony is crowded for room, and has three supers, and the top one is not ready to come off, I would give it, bees and all, to some weaker colony. I have never had quarreling when I did this. In hiving a swarm, I hived it in two cases of the Heddon hive, with only starters in the frames. It is hived upon the old stand, and the old hive set by its side. The supers are transferred from the old hive to the swarm. In about three days, after the bees have quieted down and recovered from their swarming-fever, I remove the lower case. If hived in only one case there is danger of their absconding, but there is no danger after three days. On the seventh day the old hive is moved to a new location. This robs it of its surplus bees at the time when the young queens are hatching, and, as a rule, there is no after-swarm. If there is an after-swarm I usually go thru the hive and cut out the remaining queen-cells, and

hive it back again, when the trouble is over. Like Mr. Van Amburgh, I get my surplus from the swarm. This contraction of the brood-nest leaves a colony in a condition that is not strictly first-class for wintering. If there is a fall flow, an additional case can be given, and the bees will build up into a good colony. If the location is such that there is no fall flow, then I unite the swarms at the end of the main honey harvest. To do this I remove one-half the queens about two days before I wish to make the unions. The queenless colonies are carried and set up on the top of those having queens. Queenless bees are much more inclined to give up their location than is the case with those having a queen. There is also less danger of quarreling if the bees of one colony are queenless. This, in brief, is a sort of outline of my management with the Heddon hive.

Mr. Bingham—I would like to know how small a colony will winter well. I may say, however, that I think that colonies are more nearly of an average size in the fall than many of us imagine.

Mr. Hutchinson—I prefer a colony of ordinary strength, but the bees must be young bees. A large colony of old bees is not of much value compared with even a small one of young bees.

THE BUILDING OF A HONEY-HOUSE.

The question was asked, "What kind of a honey-house should be built for 100 colonies of bees?"

Mr. Hutchinson—My honey-house was for 100 colonies. It was only 8x10 feet in size. The sills were 2x4 inch oak scantling laid upon stones. The sides were of boards nailed to the sills and plates. It was battened. The boards were painted a dark red, and the battens white. It had a peak roof, and there was a door in each end and a window in each door and in each side. These windows allowed us to see if swarms were coming out. The windows slid to one side, and there was wirecloth over the windows on the outside. This wirecloth extended up above the windows, and was held out a little distance from the side of the building so that bees could crawl up and escape. This building answered very well as a honey-house, but we had another larger building near by that was used for a shop and storehouse. Our honey-house stood in the middle of the apiary.

H. S. Wheeler—I would like a larger house than that. I want one in which there is room to do some work, also to store from 4,000 to 6,000 pounds of honey. I would have the house at least as large as 15x16 feet.

Pres. Hilton—I agree with Mr. Wheeler. It costs but little more to build a large house than it does to build a small one. I would have it at least 12x16 feet.

Mr. Bingham—I would have a trap-door in the roof so arranged that it can be opened, and the opening closed with wirecloth. When extracting in hot weather the heat in the closed building is something that is almost overpowering. This door in the roof would allow the heat to pass off. I would have wirecloth over the windows, but inside the glass instead of outside of it. I would have my work-shop in a separate room from the honey-room. We often wish the honey-room closed, and it is not a comfortable place in which to work.

ADVISABILITY OF HAVING OUT-APIARIES.

The question was asked as to how an out-apiary should be managed in swarming-time.

Mr. Woodman—If I had it to do I should want a cheap hand to help me.

Mr. Bingham—I would keep a close watch at each apiary and see where the bees did the best, and take all of the bees to that place. I doubt if it pays, many times, to have out-apiaries. It increases the work wonderfully.

THE POSSIBILITIES OF THE WILLOW-HERB.

Mr. Wheeler told how quickly a colony had filled the combs of an upper story when willow-herb was in bloom.

Mr. Gifford—I once hived a swarm, and in seven days it swarmed again. I examined the hive and found the 10 combs full of honey, except a few patches of brood, and the two supers of sections were also full.

Mr. Bingham—I object to the publication of such stories. It induces men to go into the business only to be disappointed. In this instance they are probably true, but they are not representative yields. Michigan does not yield more than 15 pounds per colony on the average.

Pres. Hilton—For eight years I kept a careful account, and my average yield for the eight years was 75 pounds per colony.

Mr. Bingham—Yes, but that was when the woods were full of honey. It was when Mr. Root got the cistern full.

Pres. Hilton—I presume that Mr. Bingham is really

correct in saying that the average yield for the whole State of Michigan is not more than 15 pounds per colony, but in this region 50 pounds per colony is a fair average, and I can afford to hire a man to care for my bees and pay him good wages, and make money out of the business. It must be remembered that bees cannot be neglected if we are to get good yields.

Mr. Van Amburgh—I have taken as much as 50 pounds a colony in a little basswood flow; but I have had basswood harvests in which I got only five pounds.

LAYING WORKERS, HOW TO DETECT THEIR PRESENCE, AND HOW TO GET RID OF THEM.

In reply to a question as to how the presence of a laying worker could be detected, Mr. Hutchinson said:

"It can be detected by a large number of eggs being deposited in one cell. The eggs are seldom in the bottom of the cell. Perhaps the worker cannot reach to the bottom of the cell. They are always on one side, and near the bottom. When the eggs hatch all of the larvæ soon die except one, and when the cells are capped over they have a conical or raised capping the same as the capping over drone-brood. It is very seldom that a laying worker is seen. Once or twice I have seen a worker laying eggs, or at least it *looked* as if she was laying. I caught and killed her, but it did not stop the laying of workers. I presume that there is more than one in a colony."

Mr. Bingham—The bees act uneasy. Thump on the hive, and they will keep up a humming for a long time. Thump on a hive containing a colony with a queen, and the bees will make a short hum, or buzz, and then stop.

Mr. Hutchinson—The quickest and easiest way of getting rid of a laying worker is to unite the colony with some other colony having a laying queen. Or the colony with a laying worker may be moved away and a nucleus with a queen set in its place. The workers will return to their old home and join the nucleus. When most of the bees have joined the nucleus the rest of them may be shaken down in front of the nucleus, and all will be well.

PREVENTION OF BUR-COMBS.

Mr. Rankin—We have tried various frames, and the Hoffman frame with top-bars $1\frac{1}{2}$ wide and $\frac{3}{4}$ deep, spaced $\frac{1}{4}$ inch apart, gives us the least bur-combs.

Pres. Hilton—My experience is the same. With this frame I see no need of a honey-board. Such a top-bar also has a tendency to keep the queen out of the supers.

PLACE OF MEETING AND ELECTION OF OFFICERS.

Thompsonville was selected as the next place of meeting, and the following officers chosen: President, Geo. E. Hilton; vice-president, H. Gifford; secretary, W. Z. Hutchinson; and treasurer, J. M. Rankin.

W. Z. HUTCHINSON, Sec.

CONTRIBUTED ARTICLES

Purity of Drones from a Mismatched Mother.

BY G. M. DOOLITTLE.

THE following was referred to me to answer in the American Bee Journal. I don't know why, for I do not profess to be informed on such matters, as do some of our more scientific brethren in apiculture. But I will try to throw what light I can on the subject from a practical standpoint. Here is the subject referred to:

EDITOR YORK:—The Scientific American supplement No. 1207 contains an article on the honey-bee, reprinted from a pamphlet issued by the United States Department of Agriculture as Bulletin No. 1, Division of Entomology. The article closes thus:

"The fact that drones develop from unfertilized eggs is to be noted as having an important practical bearing in connection with the introduction of new strains of a given race or of new races of bees into an apiary. From a single choice home-bred or imported mother, young queens of undoubted purity of blood may be reared for all of the colonies of the apiary, and since the mating of these young queens does not effect their drone progeny, thereafter only drones of the desired strain or race and pure in blood will be produced, rendering, therefore, the pure mating of future rearings fairly certain if other bees are not numerous within a mile or two. Eventually, also, all of the colonies will be changed to the new race, and without admixture of impure blood, provided always that

the young queens be reared from mothers of pure blood mated to drones of equal purity."

Now, I wish you would answer this thru the Bee Journal, or have a specialist in queen-rearing answer it, namely: Does experience teach that queens from a mother of undoubted purity of blood produce ONLY drones of the same purity as the old queen, no matter to what race the drone belonged which the young queen met on her wedding flight? That is, does a pure Italian queen, mated to a Carniolan drone, produce hybrid workers, but PURELY Italian drones?

I have often heard that the color of the drones of any colony would show the purity or impurity of blood more certain than the color of the workers, which is contradictory to the above.

AUGUST F. KOCH, PH.D.

In the first place I object to the term "purity" as often applied to the Italian bee, and as spoken of by the writer of the above. Nearly 30 years of experience with the Italian bee has thoroly convinced me that it is not a *pure race* of bees, but only what would be called "thorobred." If such is the case, which I shall soon try to prove, then all talk about keeping an apiary of such bees pure is only a case of reasoning upon a false base or beginning, to start from. When it comes to breeding the Italian bee "to the feather," as it is termed by poultry-men, such bees are "not in it," and never have been, for the queens vary all the way from being as dark as a pure-blood German queen to one whose abdomen is of a rich orange color the whole length, even to its extreme tip, on the best specimens; while the drones and workers vary nearly as much, altho no worker-bee has ever been reared whose extreme tip was of an orange color.

Now if the queens coming from Italy, or "imported stock" as they are usually termed, produce workers with only three dark or leather-colored bands upon their abdomen, and drones which the ordinary observer would pronounce only as black drones, while their young queens vary all the way from black to those being ring-streakt, speckled and spotted, the same as being called *pure* Italians, how comes it about that any careful breeder can take these bees and by selection soon come into possession of bees so yellow that there is no sign of black on the queen, very little on the drones, and only a very little of dark or black on the extreme tip of the workers? Is it not self-evident to any unprejudiced mind, that there can be no establishment of purity in the *imported* mother from which we started?

Take a black or German queen in her purity and try the same line of breeding for a whole century, with none but drones from a German queen, and you will have only common black or German queens, workers and drones at the end of the 100 years. So if we are to start from the purity side for any experiment as to whether the drones are affected by the young queen meeting the drone of a different "blood," we must start with the German queen, or something we know came from a *pure* race of bees.

Then there is another point I wish to call attention to, which is, where the statement is made that success can be attained along this line of pure mating of queens, "if other bees are not numerous within a mile or two." Herein lies one of the weak points in "breeding for purity," which is very fallacious, and, strange to say, this fallacious part is more often put before the public than the real truth.

All careful observers know that a distance of at least five miles must intervene between the race of bees we would desire to keep pure and that of any *single* colony of another race, else all our breeding for purity is of no avail. Yea, and were I to say just what I thought I should say that the distance should be at least *seven* miles, from the experience I have had since I came into possession of my out-apiary. When I bought this out-apiary it was composed of nearly all black bees, tho some of the queens had evidently mated with drones from dark Italian stock, that being the kind of Italians chiefly kept where other but black bees were used, up to this time. At about the time I came into possession of this out-apiary, I became interested in what is termed the "five-banded" or golden Italians, those bred in this country from the dark imported stock, as before mentioned, till they were as yellow as gold.

Having become interested in these yellow bees I kept down drones from the dark Italians and allowed much drone-comb, consequently many drones of the yellow variety to come forth, and the result is, that, altho this out-apiary is fully five miles distant from my home yard, fully one queen out of six at the out-apiary shows by her progeny that she mated one of the yellow drones.

No, no, friends, there is no such thing as pure mating of queens where apiaries of different races are located "within a mile or two" of each other, and he who thus breeds, expecting to reap any certain results, is destined to an uncertainty of affairs which is not pleasant to contemplate.

All familiar with the flight of drones know that they have places where they congregate by the thousands, if not

millions, coming to these places from all over a region from five to seven miles around, and when the queen comes to these congregating places she is as apt to meet a drone from a "scurf" breed as she is one of those choice, nice, yellow "gentlemen" you would have her secure as her partner.

Late in the fall, or in early spring, drones nor queens fly so far, consequently we are more sure of pure (?) mating with Italian bees than at other times of the working season. For this reason I select combs of drone-brood from my choicest colonies, near the close of the honey season, and mass this drone-brood in a colony kept queenless and fed bountifully, so that these drones are kept after other drones are killed off in the fall, when they are "hand-pickt," so that only the best remain when young queens are reared, and a satisfactory result obtained.

And now to the real question which it is desired should be answered. There can be no question but what the *drone* is the son of his mother, for all queens can lay eggs which will perfect drones, even tho they never meet a drone, or become capable of laying worker-eggs. From this standpoint it is easy to say, that "as is the mother so will the son be," and this is what the scientists have claimed thru all the past. But there are those who claim that the son of the mother of a pure black queen, mated to a yellow drone, is not the same son, to all intents and purposes, that he would have been had this queen never met a drone at all, or had she met a drone of her own race; and I believe this last to be correct, when we come down to the very fine points of "breeding to a spot or feather."

I am fully persuaded that a succession of breeding along this line will result in a mongrel race, thru the contamination of the queen in mating; but the process will be so slow that, when practically applied, the writer from the agricultural department of the United States is very nearly or quite right. I presume the writer of the reference given was none other than Frank Benton, a man whose opinion, along these lines, is fully equal in value to that of any other in the world.

Onondaga Co., N. Y.

Rheumatism Cured by Bee-Stings.

BY ELD. DANIEL WHITMER.

IN the forepart of June, 1898, I called on Editor York, and in our conversation I remarked that I had not reported my work with the bees for a number of years, tho having manipulated them for about 20 years, and having been a constant reader of the American Bee Journal for that time. He replied that I ought to let my light shine. Therefore, remembering the best of all books giving the intelligence that if the light that is in thee be darkness, how great is that darkness, here goes.

First, then, I call the attention of the bee-keeping fraternity to the dreaded and unenjoyable rheumatism which afflicts and affects so many persons who so much desire a remedy giving relief and effecting a radical cure to the sufferer. I believe that bee-poison, with some people, is a good remedy; it has proved itself a bonanza and antidote to the writer for many years.

Prior to my entering the bee-industry, I had been a victim of the disease in its different forms, attacking the limbs and other portions of the body. Finally, by overwork in manual labor, I was attacked with sciatic rheumatism, resulting in paralysis of the back, thighs, kidneys, bladder, etc., and was under the doctor's care and confined to my bed and room for three months.

Under the doctor's treatment I became convalescent, but unable to perform manual labor on the farm. As yet the great numbness in my limbs was so present that in my invalid condition I chose apiculture as a pursuit to give me a livelihood.

One day in handling a colony of bees I became somewhat careless in the manipulation, and irritated the bees to the extent that they rushed out of the hive and stung me desperately on the most numb parts. If I had no feeling before, it was evident I had then, for I just danced as I never did before, for I don't believe in it.

In 24 hours I was a well man, so far as rheumatism was concerned, numbness all gone. I am liable to get it in the fall and winter. It has returned three times in 20 years, and subsided every time when I got out with my bees in the spring.

I reported my cure to my physician, giving the remedy that did it. He stood before me staring and with amazement, and said that the poison of the bee-sting would have that effect. So at the next medical institute, at Chicago, he

reported my case and cure to the medical faculty, after which I had calls for bees that the poison could or might be extracted in alcohol to be given internally as a remedy for rheumatism.

My general health has improved during all these years.
St. Joseph Co., Ind.



Feeding Sugar Syrup to Fill the Brood-Combs Prior to the Main Honey Harvest.

BY W. W. M'NEAL.

I CANNOT but think it a mistake on the part of anyone who resorts to the use of sugar syrup in the manner spoken of to secure a crop of honey. The feeding of it to stimulate the queen to increase activity, thereby getting the combs filled with brood instead of syrup is certainly a more practical method and less questionable. Feeding bees is a fussy, unpleasant work at best; when the word is spoken and the act performed, the story will reverberate up and down the valley and adjacent hills till they who eat honey decide to buy it of some one else. If the colony is allowed an abundance of good, ripe honey the fall previous, or given a sufficiency at one feeding in the spring of the year, they will usually be found able to take care of their share of the honey crop when it comes.

To feed bees sugar syrup and get it stored in the brood-combs in the manner they store when gathering from the flowers, is something every one cannot do, or will not take the time to do. If only a little is fed for a goodly number of days, surely none of it can be stored for future use unless the bees are gathering from other sources enough to meet their needs, and if they are given syrup in quantities to enable them to do this, it will most certainly be done at the expense of brood or numerical strength.

When the honey harvest arrives the result most likely will be one of two things; The queen, if she be one or two years old, will issue with a swarm; if she be of the current season's rearing, the bees will clear the brood-combs for her of the syrup, and carry it into the supers. If they never do this, why is it that a swarm having a young fertile queen and hived on drawn combs during a good honey-flow continues to work right along in the sections for sometime after the flow has ceased? Will those who insist that bees do not carry above a portion of the syrup when the brood-combs are crowded at the opening of the harvest consent to feed a dark grade of extracted honey prior to the coming of the *white* honey? The addition of sugar syrup to well-ripened clover or basswood honey does not improve the quality or color, be it done by the bees or the apiarist. The darker grades and thin, watery, unripe honey may be made better; but to sell it under the name of *honey*—well, say, my esteemed bee-keeping friend, wouldn't you feel just a little bit wronged if some one to whom you had paid the price of best pure honey would deliver instead an article composed of sugar syrup and honey, and the whole labeled "honey?"

Bee-keepers should not be too loud in their condemnation of glucose when their own houses of stone are composed so largely of glass. I feel that no one can be more bitterly opposed to the use of glucose with honey than myself. Such adulteration cannot be other than a voluntary effort to deceive for the sake of gain. But to ignore such wholesome proof as the bees produce, that the syrup or honey of the brood-combs is oftentimes carried into the supers—a portion of it, I mean—and there stored in the comb along with the honey being gathered from the field, is a moral slackness which gentlemen of the brotherhood should be very careful of.

O haste the time when there will be made known some simple, reliable means of detecting the presence of glucose or cane sugar in honey! Then our patrons may read from the label on can or bucket the surety of the genuineness of its contents.

I am prone to believe, owing to the largely varying flavor of pure honeys, that adulteration is not nearly so prevalent as the belief thereof. But a world of suspicion on the one hand, and a company on the other practicing the adulteration of honey, and no ready means to convince a quizzical customer that the honey one is selling is, beyond peradventure, strictly pure, has changed the selling of honey in many places from a pleasant to an unpleasant one.

When honey is bought in a distant market to hold one's trade, great care and judgment should be exercised in selecting and in the handling, if the apiary be close to where the honey is kept. Honey that differs widely in flavor from

what people are accustomed to buy will generally find poor sale; but it may be a fruitful source of foul brood contagion, and so prove to be a pretty expensive way of holding the trade in honey. Alfalfa extracted honey is certainly pleasing enough in body and flavor to suit the most exacting purchaser; but even this I would not feed to my own bees without first diluting with water and boiling thoroly.

With proper precaution I believe it to be to one's interest to buy when his own crop is short. As well as I like the taste of alfalfa honey the daintiest little mouthful distresses me as if it were poison pure and simple to my stomach. I have eaten of a good many kinds of honey, but none save the alfalfa ever hurt me. I have sold it quite largely with the best of satisfaction to all parties concerned, and know of but one other case who, like myself, was made sick from eating it.

A good article of extracted honey, to my notion, is better than the same in the comb, and I fully believe that honey in this form will be the only way it can be produced at a profit in the near future.

The sooner bee-keepers cease to stir up further opposition by the injudicious feeding of sugar syrup the better it will be for the pursuit.
Scioto Co., Ohio.



Law and Honey Prices—A Reply to Mr. Doolittle.

BY EMERSON TAYLOR ABBOTT.

THERE is a certain animal which is said to become very much excited at the appearance of a red rag, and some of my remarks seem to have had a like effect on Mr. Doolittle (see page 195), yet, for the life of me, I cannot tell why. There seems to be no reason why he should lash himself into such righteous indignation, unless he has lookt at the dark side of things so long that his vision of the crown and glory of life, health and happiness, has become a little blurred.

Mr. Doolittle, this is not a radically bad world, and "God is not dead," even tho they did feed our soldiers on bad meat, and just now we are engaged in an inglorious effort to kill off a lot of half-civilized Filipinos. It is true, however, that some men are a good deal richer than an exercise of common honesty would seem to warrant, but I see no advantage in becoming greatly excited about it.

I have very positive views on the subject which Mr. Doolittle touches, but I am thoroly confident that the American Bee Journal is not the place to discuss them. I think I can see these things just as "clearly" as Mr. D., but perhaps they may not look the same to me as they do to him. Let that be as it may, I want to set myself right, for I am convinced that the two articles referred to, taken as a whole, do not teach what Mr. D. tries to write into them. Perhaps I did not express myself clearly, but what I wanted to say, in the pure food talk, was that no law should be past *with a view to raising or lowering the price of any product*. Especially should no law be past *because it will enable a certain class of people to get more for their products*. This is not what law is for, but to promote the *common good*. Briefly, to illustrate, I do not believe we have any right to pass a law against the adulteration of honey *because it will raise the price of honey*, but because it is a *fraud to adulterate*, and all frauds should be suppress.

Bless your soul, Mr. Doolittle, I had no idea of discussing what effect laws *do* have on the price of things when I said, "Law has nothing to do with increasing the price of the produce of any individual;" and I still insist that this is not the province of law, but rather to guarantee unto every man "Life, liberty, and the pursuit of happiness." Perhaps it would have been better if I had said, "Law should have," etc.

I want to enter a mild protest against Mr. D.'s repeated assertions that evidently Mr. Abbott believes so and so, for I am quite sure he does not know what I do believe on these subjects. I have never discuss them in any bee-paper, nor do I intend to do so. There is not much occasion just now to discuss low prices of anything in this locality, especially the price of comb honey, for there is very little to be had, and I could sell a great deal of it at remunerative prices, if I only knew where to get it. Wonder which it was, *law or politics* that brought about this state of things!

Let me say, in conclusion, that I honestly believe that the adulteration fraud is the gigantic crime of the century, and a disposition to wink at it shows a lack of moral sentiment which should startle into activity the most sluggish and indifferent citizen of a free country. Adulteration ignores the foundation principles of all moral sentiment, and undermines two of the recognized basic ideas of legiti-

mate trade and commerce, namely, that a contract is the agreement of two minds as touching one thing; and that every man who has come into the lawful possession of any article has a right to fix the price at which he will part with it. If he makes the price so many pounds of honey, and you give him half the amount in *glucose*, you defraud him just that much, and every man who does it is a criminal, and, as such, should be punished severely. If this raises the price of honey, all right; if it lowers it, all right; but let us be honest, "tho the heavens fall." No, Mr. Doolittle, your "pet hobby" is not of more importance than this. Nothing can be.

Buchanan Co., Mo.

QUESTIONS AND ANSWERS

CONDUCTED BY

DR. C. C. MILLER, Marengo, Ill.

[The Questions may be mailed to the Bee Journal office, or to Dr. Miller direct, when he will answer them here. Please do not ask the Doctor to send answers by mail.—EDITOR.]

Farm-Stock Damage an Apiary.

I have 156 colonies of bees. We have a man here that is against bee-keeping; he believes in spraying when in blossom. There was a law past last winter that stops him on that, but he pastures 50 head of stock on the byways, which have been in my apiary and damaged the bees to a great extent, turning two hives over, pushing several from the stands. The disturbance is bad, the bees fill up with honey in cold weather, and can't fly. NEW YORK.

ANSWER.—I don't suppose there's anything different about the case from a case of damage in which there were no bees in the case. The probability is that your laws are such that one is not allowed to let his stock run in the road, and is responsible for damage done by them if they are allowed to run at large. In that case you would sue before the proper officer, probably a justice of the peace, the same as in any damage suit. If there is any special difficulty in the case, you can count on help from the United States Bee-Keepers' Association, providing you were a member before getting into trouble. If you are at present a member you are one of the wise ones, for some put off securing membership until they get into trouble, and then it's too late. Besides that, every bee-keeper should be willing to pay his dollar a year to help put down adulteration. A dollar spent in that way may put several dollars in his pocket in increase price of honey.

Grapevines for Shading Hives—Frames of Granulated Honey.

1. Are grapes good for bees?
2. I am thinking of putting a grapevine at every other hive for a shade, and also for the fruit. What is your opinion of it?
3. Would the grapes make a good shade?
4. I have about 150 or 200 brood-frames with granulated honey in them. Is there any way to get them out, besides tearing up the combs? They were taken off last fall. KENTUCKY.

ANSWERS.—1. At different times my bees have worked on grapes after birds have picked holes in the grapes, and I don't know that any harm came from it.

2 and 3.—So far as fruit is concerned, grapes will do very well planted in an apiary. For shade a grapevine is not so very satisfactory, unless you have a trellis overhead, which is expensive.

4. Don't think of destroying the combs. Spray them with water and put in the hives for the bees to clean up, spraying again as often as needed.

Bees That Have Foul Brood.

In preparing my bees for winter last season I found, to my great surprise, that 2 colonies of the 12 were entirely destroyed by foul brood, and that every other one showed traces of the same disease. I would have found it out before, but the only time I have to work with them is on Saturday afternoon of every month, as all the remainder of my time is taken up with work and study.

Is it possible to cure the remainder, and how? is what I would like to know. I should like to know what books or pamphlets contain the most information on that subject, as I would like to make a thorough study of it, and might bring some of my knowledge to assist in getting an easy cure for it.

As assistant engineer of a large ice-machine manufacturing establishment, I thought that maybe a little chilly air supplied to them might affect a cure, as we have an abundance of it at our disposal from 0 to 40 degrees, Fahr., below.

For the past few years I have derived much pleasure in handling my bees, and only regret that I haven't more time to give them, but I should feel very sorry to be obliged to destroy them

all, as I have purchased all the queens from different apiaries, and find pleasure in trying to keep some from swarming, making some work, and supplying upper stories to others that seem to turn mud to honey, they gather it so fast. Of all the queens I ever had I got one from the South that beats anything I ever saw swarming, and the swarms manage to get in the highest branches of the trees, and afford the entire neighborhood amusement watching us get them down and hiving them.

All my hives are of Root's latest and in summer are entirely covered by caladians and cannas, which makes it difficult to handle them, but they set off the apiary beautifully, which is nothing more than a large flower-garden. OHIO.

ANSWER.—Send 25 cents to the publishers of this paper and get Dr. Howard's pamphlet on foul brood, and you will have the best thing in the language.

I've never yet heard of foul brood spores being injured by cold. It's the extreme of temperature at the other end that's hard on them. But I'm not sure whether a continued application of 40 degrees below zero has ever been faithfully tried.

Letting Bees Fly After Shipping.

When a colony of bees has been shipped a distance, and confined for several days, is it best to open the hive and allow them a flight upon arrival? Or, let them get quieted down first, and open the hive say in the evening? IOWA.

ANSWER.—I don't know of any reason why it is not better to let them out as soon as possible.

Wood Foundation-Splints Instead of Wiring.

1. Why will not wiring brood-frames do just as well as to mussy with the sticks you use?
2. Would not the Van Deusen wired foundation be just the thing if it is put in the new grooved top-bar, and let the wires run up and down in the frame?
3. Had you tried wire in any form before you finally decided on the sticks?
4. Are there any other advantages over the wires, by using sticks, than the prevention of sagging or stretching?
5. It seems to me your sticks don't prevent the comb from breaking loose from the top-bar in moving bees. S. DAKOTA.

ANSWERS.—1. It is no more trouble to mussy with the sticks than to mussy with the wire, and I have never been able to get as good combs with wire as with sticks.

2. Good combs might be secured thereby.

3. I have had wired frames in use by the thousand for many years—began using them from the first that wiring was made known; have perhaps 2,500 such frames now; have tried wiring horizontally, vertically, diagonally, and mixt, in fact in perhaps all ways recommended and some not recommended. Yes, I've tried wiring.

4. I have never been able with wires to have perfect combs built completely to the bottom-bar, and I have such combs with the sticks.

5. When a comb fills a frame completely from top to bottom, did you ever hear of its breaking away from the top-bar in moving? Probably the most popular form of wiring now is the horizontal. Do you think a horizontal wire that is half an inch or more below the top-bar will do more to prevent breaking from the top-bar than five sticks that are $\frac{1}{4}$ -inch or less from the top-bar?

Please remember that I don't insist that any one else shall use foundation-splints. I only say that so far as I have tried them I like them very much, and have just ordered 4,000 more.

Brood-Frames and Their Spacing.

There has appeared in the American Bee Journal a description of the brood-frames used in your hives. I have had several years' experience with different styles of frames, and have decided that your idea of a brood-frame is about right. Kindly give the dimensions of your frames, and who manufactures them.

What size nails do you use in spacing (brad or flat head), and how far from the end of the top-bar, and how far down on the side piece, are they driven? CITY.

ANSWER.—Top-bar, $18\frac{1}{2} \times 1\frac{1}{2} \times \frac{3}{4}$. At each end is cut out $\frac{1}{4} \times 9-16$, leaving the end 5-16 thick. A saw-kerf to receive foundation runs lengthwise along the underside of top-bar, 5-32 wide and $\frac{1}{4}$ inch deep. End-bar, 8 9-16 $\times 1\frac{1}{2} \times \frac{3}{4}$. The bottom-bar is in two parts, each $17\frac{1}{2} \times \frac{3}{4} \times \frac{1}{4}$. Only one of these pieces is nailed on when the frame is made, the other being nailed on after foundation is in place. The sheet of foundation is $16\frac{1}{2} \times 8\frac{3}{4}$. No wiring is used, the foundation being supported by five vertical basswood splints, $7\frac{1}{2} \times 1-16 \times 1-16$. These splints are boiled in beeswax and prest into the foundation while warm.

For spacers to hold the frames at the proper distance from each other, common wire nails are used $1\frac{1}{4}$ inches long with flat heads 3-16 inches across. A gauge is used in driving in these nails so that the head shall project $\frac{1}{4}$ -inch above the surface. Two nails are on one side at one end, and two nails on the other side at the other end. The nail in the top-bar is about $1\frac{1}{4}$ inches from the extreme end, and 7-16 from the top. The other nail is driven in the

end-bar about $2\frac{1}{2}$ inches from the bottom. Hold the frame up before you as it hangs in the hive, and on the side next you the two nails will be at the left, while at the right they will be on the side opposite. To hold the frame in proper place endwise, small staples are used about the same as window-blind staples. The staple is driven into the end-bar close under the top-bar.

It is only right to say that I'm not sure whether the width of these top-bars, $1\frac{1}{4}$, with a space of $\frac{1}{4}$ -inch between them, is the very best. The bees build more brace-combs between the top-bars than are desirable.

Some of my frames were made by the A. I. Root Co., and some by the G. B. Lewis Co. I think neither of them make such frames, only to order.

Moldy Combs—Putting on Supers.

My Italian bees in 8-frame dovetailed hives have wintered well considering the cold weather we had here, being 20 degrees below zero, and one spell was 30 degrees. If I had not had my bees packed in winter-cases I would not have had a bee now. But the combs which contain the honey toward the back part of the hive are moldy and very damp. I saw water dropping off of them and lying on the bottom-board, and water standing in the empty cells at the bottom of the comb. They have lots of honey yet. What is the cause of the above conditions of mold and the combs sweating so? And is there anything I should do, or shall I let them go? Will they come out all right themselves?

The combs at the entrance of the hives are dry, and not moldy. The bees seem to be flying finely, and are very vigorous, trying their best to rob a colony of black bees.

2. They have four brood-frames about full of honey, and the other four about half full. Should I put on a super by the middle of April?

WEST VIRGINIA.

ANSWERS.—1. Probably the entrances were hardly open enough for sufficient ventilation. The parts farthest from the entrance would suffer most, the moisture settling there. The bees will probably correct the trouble of their own accord.

2. It is hardly wise to put on supers till a harvest comes from which they can store, but if you find the queen is crowded for want of room in which to lay, take out a full comb of honey and replace with an empty comb.

Taking Care of Combs of Honey.

I have six hives that the bees froze in. I cleaned the bees out, but the hives are full of honey. I want to keep them, as I have made arrangements with a neighbor for swarms to put into them. What will be the best way to do, to keep the combs out till used? Bees did very poorly here; 90 percent of those not stored are dead.

IOWA.

ANSWER.—A cool, dry cellar is a pretty good place, as in such a place the worms will make very slow headway. If such a place is not at hand, they may be kept above ground, being spaced well apart, where moths and bees cannot reach them. Look at them from time to time, and pick out with a wire-nail any worms that get a start. They may be brimstoned, but it takes very heavy brimstoning to affect worms in brood-combs. Probably the very best way is to put a hive full of combs under a hive containing a strong colony.

The Bee-Keepers' Association—Enameled Cloth.

1. Where can I obtain the proper information in regard to joining the Bee-Keepers' Association?

2. Is it necessary to scrape the caps clean, providing they were used the year before?

3. Do you advise the use of enameled cloth over the brood-frames?

NEW YORK.

ANSWERS.—1. Right here. You probably mean the United States Bee-Keepers' Association. Send a dollar to the General Manager, Hon. Eugene Secor, Forest City, Iowa, and tell him you want to join the Association. Or, send to the Secretary, Dr. A. B. Mason, 3512 Monroe Street, Toledo, Ohio, or to the editor of this paper. You can hardly do a wiser thing than to become a member at once.

2. If you mean hive-covers, I should say it was not necessary.

3. That depends somewhat on how the hives are made. If the covers come within $\frac{1}{4}$ -inch of the top-bars, nothing of the kind is needed. If the covers don't fit down so close, then something in the line of sheets or quilts is needed. Perhaps, however, heavy sheeting is better than enameled cloth.

A Quintet of Questions.

1. I use shallow Hoffman frames ($5\frac{1}{2}$ deep) for extracting. Would you advise me to get a Cowan extractor with baskets large enough to hold two of these frames in each basket? How would the No. 17 two-frame Cowan do?

2. Is it necessary or advisable to use a dummy or follower in the extracting-super when using Hoffman frames, as above described?

3. In having a swarm, which is the better plan (a) to have all the frames filled with foundation, (b) partly foundation and part

drawn-out combs, (c) or partly foundation and part $\frac{1}{8}$ or 1 inch starters alternately placed in the hive? Authorities seem to differ on these points.

4. Which is the best foundation to use in shallow frames, medium brood, light brood, or thin super? Should I use full sheets or starters? Will it be necessary or advisable to wire shallow frames $5\frac{1}{2}$ deep?

5. I can get good, strong colonies of Italian bees at \$7.00 or \$8.00 each; 1st swarms, at \$3.00 each; 2nd swarms, at \$1.50 each. Which would be the cheapest to buy considering the fact that increase of colonies is most desired? The full colonies would be in their own hives. For the swarms I would have to provide hives, frames, etc., buying bees only.

IOWA.

ANSWERS.—1. I don't know, and I'd be obliged if some one who has had experience with such shallow frames would answer. I should think the No. 17 you mention would work all right if it doesn't take too careful work to get the two combs in the same basket.

2. It is advisable to use a dummy with any kind of a self-spacing frame. Otherwise you can't easily get out the first frame.

3. You are right in saying authorities differ, so you can't expect me to do more than to give my own preference, which would be, first, full combs; second, full sheets of foundation. If I had to use part starters, I'd use them by themselves, and not alternately.

4. Light brood with one horizontal wire will probably work all right.

5. That's a hard one. If you'll tell how much the old colonies will swarm, it will be easier to answer; also what time you can get the first and second swarms. If they come early enough, I'd risk the second swarms. Take an average season, and perhaps the first swarms will be best.

Sections with Starters Left Over.

I have been watching the Bee Journal for some time to see if I could use my pound sections that were in the supers last year with the starters in, or whether I have to throw them all away. I have about 1,700 of them that are not drawn at all, but are just as when put in the sections last year.

NEW YORK.

ANSWER.—By all means use all the sections you have left over that are nice and clean.

"Adel" Bees—Zinc for Solar Extractor.

1. On page 150, New Jersey asks, "What are yellow-banded Adel bees?" You say you never saw any of them? Aren't you mistaken? Frank Benton says, "Select queens of any well-established race or variety may properly be called Adel queens." See Vol. XXXIV, No. 25, American Bee Journal, page 783.

2. Would a sheet of zinc be suitable for making a solar wax-extractor?

WISCONSIN.

ANSWERS.—1. The word "adel" is a German word meaning "nobility." Mr. Benton is right in saying that such a word might have been applied in a general sense to any strain of bees of good quality, just as any good strain of bees might be called "honey-getters." But if you should develop a particular strain of bees and call them "honey-getters," bee-keepers would be likely to respect that title as belonging to your strain of bees, especially if you used the name in some foreign language. So when Mr. Alley uses that name for a particular strain, I see no reason why his title to that name should not be respected. Instead of being a strain of Italians, Mr. Alley says they are from Carniolans. In a late letter he says: "Don't you remember what F. Benton said in Gleanings about the two kinds of bees in Carniola? Well, he said this: 'I never yet saw an apiary in Carniola that contained all steel-gray bees; many of the bees are yellow-banded.' The Ad'l bees I have were bred up from the yellow strain. Ad'l means, or rather signifies, superior, and as the natives consider the yellow bees superior to the dark bees, they call them Ad'l bees."

2. I'm not sure just how you would mean to use the zinc, but I see no reason why sheet-zinc might not be used for any part of a solar wax-extractor except the glass part. Very likely you mean the perforated part, and for that it ought to work all right.

York's Honey Almanac is a neat little 32-page pamphlet especially gotten up with a view to create a demand for honey among should-be consumers. Aside from the Almanac pages, the forepart of the pamphlet was written by Dr. C. C. Miller, and is devoted to general information concerning honey. The latter part consists of recipes for use in cooking and as a medicine. It will be found to be a very effective helper in working up a home market for honey. We furnish them, postpaid, at these prices: A sample for a stamp; 25 copies for 40 cents; 50 for 60 cents; 100 for \$1.00; 250 for \$2.25; 500 for \$4.00. For 25 cents extra we will print your name and address on the front page, when ordering 100 or more copies at these prices.

The Premium offered on page 254 is well worth working for. Look at it.

GEORGE W. YORK, Editor.



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United States Bee-Keepers' Association.

Organized to advance the pursuit of Apiculture; to promote the interests of bee-keepers; to protect its members; to prevent the adulteration of honey; and to prosecute the dishonest honey-commission men.

Membership Fee—\$1.00 per Annum.

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GEN'L MANAGER AND TREASURER—Eugene Secor, Forest City, Iowa.

Place and Date of Next Meeting:

Philadelphia, Pa., September 5, 6 and 7, 1899. Every bee-keeper is invited.

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NOTE—The American Bee Journal adopts the Orthography of the following Rule, recommended by the joint action of the American Philological Association and the Philological Society of England:—Change "d" or "ed" final to "t" when so pronounced, except when the "e" affects a preceding sound.

Don't Neglect Your Bees.—Winter losses have been severe, and there will be a tendency in the minds of some to be discouraged. But the wise bee-keeper will redouble his energies to take the very best of care of colonies that remain, treasuring as gold empty combs that are left. With the latter he can rapidly build up again, and there is no reason to believe that a good harvest may not be at hand, with fair prices.

The "Association" and the "Union."—A few weeks ago the matter of uniting the National Bee-Keepers' Union and the United States Bee-Keepers' Association was again brought up after a rest of about two years. We notice in a recent issue of the Modern Farmer and Busy Bee, Editor E. T. Abbott had this to say:

"There is an earnest effort being made to unite the United States Bee-Keepers' Association and the National Bee-Keepers' Union, as the aim and purpose of the two societies are the same. However, the matter seems to have reached a point where no further progress can be made until there is some radical change in the management of the National. General Manager Newman, of the National, in a letter to General Manager Secor, of the United States Association, makes such demands as a condition of the union as are never likely to be assented to by the general manager and directors of the United States Bee-Keepers' Association, and there the matter rests. The writer will say for himself, as a director of the last named society, that the union will never take place by his consent on the conditions set forth by General Manager Newman. The new

society has a work to do, and under the circumstances the best thing it can do is to go on and do it without any ill-will toward any other similar organization. Perhaps the time may come at some future day when the desired union can be brought about without any friction."

Of course, if there is to be a union of the two societies the initiatory steps must be taken by the National Bee-Keepers' Union. We were given to understand that its members would like to see a consolidation take place, else we would not have mentioned the subject again in these columns. We presume if five or six of the Union's members should request that a vote be taken at once upon the subject, such vote would have to follow.

But we are not advising at all. As we said in a previous editorial on this matter, the door is open for the Union to come into the Association whenever it decides to cast in its lot.

Nomenclature in Apiculture seems to be somewhat changeable, and, like so many other things in bee-keeping, varies with "locality." For example, in England "plumping" seems to be a term in common use, the meaning of which is hardly known in this country. Perhaps if this should fall under the eye of the esteemed Editor of the British Bee Journal he will tell us just what "plumping" means. Even no further away than Canada different terms are used. In the last number of the Canadian Bee Journal, page 518, occurs the expression, "take ten colonies of strong colonists;" and on page 521, "combs that had a light cap. . . . left the honey on cap." Will Editor Holtermann please give us the meaning, as there used, of "colonists," "light cap," and "on cap?"

New York's Foul Brood Law.—It seems that New York bee-keepers were more fortunate than those of Illinois, as we learn from the following that the New York legislature past the Foul Brood Bill:

The proposed Foul Brood Bill has become a law in New York. It is hoped that we shall be able to check the disease next summer. It was secured thru the efforts of the New York State Association of Bee-Keepers' Societies. Its success will depend upon the man who may be appointed inspector.
HARRY S. HOWE.

We congratulate New York bee-keepers on their success. The House Appropriation Committee of the Illinois legislature approved \$8,000 for destroying the San Jose scale, but refused to approve the expenditure of \$700 for exterminating foul brood. They also voted \$6,000 to the horticulturists, but not a cent for the bee-keepers. We hope soon to have the privilege of publishing the names of those who "turned down" the bee-keepers, so that when they come up again for election, voting bee-keepers may have a chance to "turn down" them. There was no good reason for ignoring the request of the bee-keepers, that the appropriation for the destruction of foul brood in this State be approved.

Apis Dorsata—An Explanation.—Dr. Miller sends us the following in regard to the way he was reported in the Chicago convention proceedings when discussing *Apis dorsata*:

MR. EDITOR:—On page 213 I am reported as saying with regard to *Apis dorsata*: "I am anxious that they should be brought here." Put in that unqualified way, that does not express my true sentiments. I am anxious they should be brought here if it is first known that they can be domesticated and kept under control. With my present light I am anxious they should be kept away. If they cannot be kept under control I can see no other result from bringing them here but to have them run wild and use up the nectar that our hive-bees should get. I have little fear as to that in the North, for I hardly believe they could

stand our Northern winters, but the result might be anything but desirous in the South.

It seems to me that it ought to be easier to domesticate them in their native region than to bring them here and domesticate them. Let the effort first be made where they are, and, if successful, *Apis dorsata* can be brought here; if the effort should be unsuccessful, *Apis dorsata* can remain in foreign lands, and this country be saved from another English-sparrow scourge. C. C. MILLER.

We agree exactly with Dr. Miller in the above—not because it is Dr. Miller who wrote it, but because we think his view in the matter is eminently sensible. It is always safer to be sure you are right before going ahead.

A Group of Canadian Bee-Keepers, to the number of 17, were taken in a photograph, and a full-page illustration therefrom graces the pages of the Canadian Bee Journal. They're a fine looking lot, making one wish for closer acquaintance.

Honey Advancing.—Gleanings says that good extracted honey is a scarce article, being $1\frac{1}{2}$ to 2 cents higher than a year ago. A good article of comb honey could be bought a short time ago for 10 cents, and now "fancy" brings all the way from 12 to 14, and No. 1 from 10 to 13. There was one year, a good many years ago, when honey was so scarce that in spring it went up quite materially, but since then the rule has been that honey kept over till spring brought a lower price. There seems at present to be no question that good honey is a pretty scarce article, but it will not be so very long until the new crop from the South begins to come in.

Getting New Subscribers for the American Bee Journal ought to be easy work at this time of the year. The warm spring days will soon be here, when the bees will begin to hum again, and then their keepers will be interested in reading about them, and will want a good bee-paper. The Bee Journal, we believe, will just suit them.

From time to time we offer some excellent premiums to those of our regular readers who will go to the trouble of getting one or more new subscribers and send in the money. We hope that those who value the Bee Journal the most (our regular readers) will try to get their bee-keeping friends and neighbors to subscribe for it.



MR. FRED D. GIBBONS, of Orange Co., Ind., writing us April 5, said:

"The American Bee Journal gets better all the time. It is a welcome guest in our home."

THE FARM JOURNAL is 22 years old, prints 40 tons of paper a month, and is out of debt; it is cut to fit every progressive farmer and villager. Very well, see the offers on page 254. We will have the Farm Journal sent to your address for the balance of 1899 and all of 1901, 1902, 1903, and 1904—nearly five years—and it will get to you if alive anywhere on this planet.

R. L. TAYLOR criticised Dr. Miller for using the expression, "bring to a boil." The Doctor defends his usage by referring to the Standard Dictionary, the latest and by far the largest work of the kind ever printed. Mr. Taylor objects, saying no other dictionary makes any mention of "boil" as a noun in this sense (heating water). Dr. Miller is entirely right.—Stenog, in Gleanings.

A PATHETIC APPEAL.—The following poetical effusion won for its author, the Editor of the Rocky Mountain Celt, the prize of \$1,000 for the best appeal poem to subscribers to pay up their subscription:

"Lives of poor men oft remind us honest men won't stand no chance. The more we work there grow behind us bigger patches on our pants, once new and glossy, now are strips of different hue, all because subscribers linger and don't pay us what is due. Then let us be up and doing; send in your mite, however small, or when the snow of winter strikes us we shall have no pants at all."

We do not republish the foregoing prosy-looking poetry because we fear being pantsless by another winter, but thought it might help to remind some of our readers that their subscriptions were not paid up. We hope that all who are in arrears will remit promptly, and thus help to keep up the financial end of the Bee Journal—the very important end of the business—the "business end," as is sometimes spoken of the bee.

MR. F. GREINER, of Ontario Co., N. Y., wrote us April 9, wishing to make the following correction:

EDITOR YORK:—In your synopsis of my article, "He or She," on page 216, the meaning of a certain phrase is rather misrepresented. I do not wish to have it go that way, lest the German readers of the American Bee Journal might not think very highly of my conception of the German language. I did not say that the Germans nowadays call the queen-bee "kœnig" (king), for the intelligent, up-to-date bee-keepers do not. But it is a fact that this word "kœnig" has been used by the people just the same as the word "king" has been used here among English-speaking people.

In the case of the drone it is true that in the German language the drone has the feminine gender—"die drohne."

F. GREINER.

EMERSON TAYLOR ABBOTT is no longer connected with the Modern Farmer and Busy Bee. We learn this from the following, which we received from Mr. Abbott last week:

"NOTICE.—I hereby cancel all offers to furnish the Modern Farmer. It has past beyond my control. Forced out because I objected to a certain class of advertisements.—EMERSON T. ABBOTT."

Mr. Abbott was making a good paper, and it seems unfortunate that his connection should be severed. But we are glad to know that he values principle above financial gain. There are too many in business who are just the opposite. Truly, the love of money is the tap-root of much evil.

THE MAN WHO SUCCEEDS.—The man who makes a success of an important venture never waits for the crowd. He strikes out for himself. It takes nerve. It takes a great lot of grit. But the man who succeeds has both. Any one can fail. The public admires the man who has enough confidence in himself to take a chance. These chances are the main thing after all. The man who tries to succeed must expect to be criticised. Nothing important was ever done but the greater number consulted previously doubted the possibility. Success is the accomplishment of what most people think can't be done.—C. V. White.

MR. W. T. RICHARDSON AND WIFE [of California], who spent several months in the East, have returned to his ranch and his bees in the Simi Valley. He reports better bodily health, but a sickly dry-weather feeling when he considers bee-matters. A goodly number of his 1,200 colonies are still on deck, but a good amount of feed will be necessary to carry them thru the season, provided it does not rain. Our conversation in this country is regulated by that proviso.—J. H. Martin, in Gleanings.

Langstroth on the Honey-Bee, revised by the Dadants, is a standard, reliable and thoroughly complete work on bee-culture. It contains 520 pages, and is bound elegantly. Every reader of the American Bee Journal should have a copy of this book, as it answers hundreds of questions that arise about bees. We mail it for \$1.25, or club it with the Bee Journal for a year—both for only \$2.00.

Biographical.

MR. A. C. SANFORD.

My father and mother came from Newtown, Conn., to Wisconsin in an early day. I was born in 1852, at Ashpup, Dodge Co., Wis., and lived with my parents till 21 years of age. I was married to Irene Blair in 1874, and in 1876 we moved to Pierce Co., Wis., where I have since resided. I located in a heavily timbered section where the basswood grows tall, clovers abundant, and wild flowers are in profusion—a bee-keeper's paradise.

In my youth I loved bees and honey very much—especially the latter—and early I was eager to learn all about them. But father did not keep bees, and there were few kept in that locality, and those in a primitive manner. I longed to get a chance to try my hand at bee-keeping, but was obliged to be content with hunting bee-trees, and I learned in that way some of the habits of bees.

In 1876 I purchased my first colony of bees, paying \$7.00 for them; then my study with the bees began. I had the opportunity of being neighbor to a bee-keeper of considerable experience, and from him I learned many things.

My first season I got about 30 pounds of comb honey and one swarm. The first winter I lost the old colony, but the new survived. The following spring I purchased several colonies in box-hives, and experimented with them by transferring to frame hives. I procured the book "A B C of Bee-Culture," and with the aid of Gleanings and the American Bee Journal I was soon into the mysteries of bee-keeping. My wife used to say, "Albert, you spend so much time with those bees that they won't amount to much;" but the first thing she knew I had a fine lot of honey, and sold \$125 worth. Of course, after that I could fuss with the bees all I liked. And so I did. I kept on increasing till I had all I could handle (and sometimes more). I have never been without bees or honey since, and the American Bee Journal has come to me regularly ever since. So, Mr. Editor, I am nearly to the 25-year mark.

With the money I made from my bees I paid off the indebtedness on my farm, built a large brick house, improved my farm, and purchased a young herd of purely-bred shorthorn cattle in 1891, which have been kept on my farm, and have now increased till there are 30 head; also many have been sold.

This is giving the bees a good deal of credit, but any good, intelligent, industrious and honest person can do what I have done if he goes at it in the right way.

A. C. SANFORD.



Queens in Diseased Colonies, that is, queens in colonies that have suffered from diarrhea in the winter, the Canadian Bee Journal does not consider as good as if the workers had remained healthy; and the introduction of fresh queens is advised.

Breeding in Midwinter is spoken of in Bee-Chat as a thing that commences regularly in normal colonies. That shows the milder climate of England, especially as compared with the northern States, and would be a surprise to Hon. R. L. Taylor, whose queens do not commence laying till April.

The Cluster of Bees Shrinks with Cold, according to Bee-Chat, in a way that is little realized by those who have made no careful examination. On some cold morning take a peep into a hive containing one of your strongest colo-

nies, and if you have done it carefully so as not to rouse the bees in the least, you will be surprised almost into wondering what has become of the strong colony you supposed present. "It seems hardly possible such a vast host can so contract themselves that a gallon measure will more than hold a population you imagined would fill at least a half-bushel."

Selection for Work Rather than Color.—Speaking of the careful selection made by American breeders in rearing queens, Editor Holtermann, of the Canadian Bee Journal, says: "I doubt very much if there has been enough selection for honey qualities; doubtless there has been a great deal for color." Mr. Holtermann is quite right.

Open - Cornered and Split Top - Bar Section.—The Canadian Bee Journal mentions as a great and valuable reform the introduction of a one-piece section in which the passage for the bees runs the entire length of the top-bar and bottom-bar. The publishers of the paper have now introduced a section with a split top-bar, the foundation being held in place by being pinched between the two parts of the top-bar.

Queens Don't Lay at Will.—The elder Dadant, now in his 82nd year, yet one of the most vigorous writers in the French bee-journals, now appears on the scene in Gleanings in defense of large hives. In reply to the objection that in large hives queens lay so many eggs that they are soon overworked, and die, Mr. Dadant says: "The queen doesn't lay at will. The eggs come out when they are ripe, and the queen cannot stop their exit."

Honey Leaflets have been reported in Gleanings as not helping sales. But a recent number gives some favorable reports. C. R. Morts says, like a mustard plaster, they work according to the way they are applied. He says they're not as costly as labels, and are 16 to 1 better. F. Z. Buchanan says: "Fully half the customers to whom I have handed a leaflet along with the honey have asked, 'What's this?' looked at the heading, and have been well along in the reading matter before I left."

Hanging Foundation the Other Way.—A "straw" in Gleanings is as follows: "W. S. Pender says that, instead of putting sheets of foundation in the usual way, he cuts the sheets in two and hangs it t'other way, and then it does not stretch. Does that mean it stretches more readily the way it has been already stretched? [It is true, I think, that foundation stretches less when hung the opposite way to what it is ordinarily supported, than when it is fastened in the usual manner. We are just planning to reverse the hang of the cells on our rolls, because we know it will be an improvement to have them the other way.—E.D.]"

Fighting Upon the Introduction of a Queen.—Mr. Doolittle says in the American Bee-Keeper that instead of dead bees at the entrance being a sign that the queen has been safely introduced, it is a sign that she may have been killed, or, what is almost as bad, maimed for life. If bees fight over a queen, not one queen in ten comes out of such a fight as good as she was before. So it is desirable to have the queen caged till all fighting is over. Mr. Doolittle says: "I have known as many as a pint of bees to be killed when the cage was thus covered, yet the queen would not be harmed at all; but let half that number of bees be killed when the queen is among the fighting bees, and she will be materially injured if not spoilt entirely."

Big Yield of Pollen with Lessened Laying.—G. M. Doolittle says in Gleanings: "Just why the queens do not breed when pollen comes in so abundantly is a mystery I have never been able to solve, tho I have spent much thought and study over the subject. The nearest I can come to the matter is that, for some reason, the bees fail to feed the queen on the stimulating food usually given at all times when she is laying very prolifically, and all know she lays only as she is fed and cared for. When laying very prolifically we see bees offering the queen food every few minutes; but at these times when pollen is coming in so as to crowd the brood it is a rare thing that I see the bees feeding the queen.... It is possible that a little very thin or diluted sweet fed at such times would have the desired effect, if fed just at night, this causing the bees to feed the queen, as it generally does at all times when so fed."

Root's Column

No-Gob Foundation.

We Have it at Last.

It has been proven that wax in the base of ordinary foundation is not utilized by the bees, but is left there practically as it leaves the mill; and the result is, when drawn out into comb, the so-called gob, or fishbone, in comb honey.

Our New Thin-Base FOUNDATION

is exactly what its name indicates—foundation with a base as thin as natural comb, with heavy deep walls.



Fig. 7, herewith shown in cross-section from an actual photo, represents the new thin-base heavy-walled foundation running about 10 feet to the pound.



Fig. 13 represents the ordinary thin foundation with heavy base and scarcely any wall, about 10 feet; the heavy base, without modification, going right into the comb honey with very little change, and forming fishbone.

We have so far only small dies, and cannot afford to sell this product for less than 75 cents a pound.

Seven or eight pieces, large enough to fill 4¼ sections, 15 cents, postpaid; 24 pieces, prepaid, 40 cents.

The A. I. Root Company
MEDINA, OHIO.

GENERAL ITEMS

Bees Did Very Well.

My bees did very well last summer. It was the first year that I ever handled them. I am 13 years old, and tend my father's bees. We have 109 colonies. I had 60 swarms last summer, and I expect to do better next summer.

LAWRENCE BROYLES.

Socorro Co., N. Mex., March 21.

Banking Hive-Entrances with Snow

I have just been out shoveling snow up to the hive-entrances, as we put out our bees (one-half of them in the cellar), and it grew cold almost immediately, and they got no flight. It snowed more or less for three days, until we have had the deepest snow of the season—about one foot—and when the sun shines the poor bees fly out, and every one is lost, so we bank snow around the entrances, yet some push out, but I think the snow will soon go off.

MRS. L. C. AXTELL.

Warren Co., Ill., April 1.

Not a Colony Lost.

My bees came thru the winter in fine shape. I have not lost a colony, but some report heavy losses. I have now young bees cutting themselves out of the cells, and combs entirely filled with brood.

F. C. YENTSCH.

Lawrence Co., Mo., April 7.

All Wintered Well.

The valuable American Bee Journal has been a great help to me, and I can't get along without it. To-day has been bright and warm, so I got the bees out of winter quarters, and they had a glorious flight. I put in 11 colonies, and all came out brisk and lively. I hope some time to know a little of the much to learn about bees.

C. W. HEWITT.

St. Lawrence Co., N. Y., April 10.

Severe Loss in Wintering.

The past winter has been severe on bees. My brother told me that about 50 percent of them have "died out" in Salt Lake County, and other localities in the State. Pres. Lovey has lost all but 4 colonies.

H. W. DUDLEY.

Salt Lake Co., Utah, April 6.

A Long, Tedious Winter.

This has been a long, tedious winter for the bees in this country. I put mine into the cellar about Dec. 1, and they are still there, but I hope to get them out in a week or 10 days. There is plenty of snow on the ground at present. I expect to lose one-third of my bees. I put 122 colonies into the cellar, and will be glad if I have 80 the first of June. Some have lost all already. We had a good, average season last year, and hope for the same this year.

J. J. MARSHALL.

Vernon Co., Wis., April 7.

Sympathy Wasted on California.

So much sympathy being wasted on the Southern California honey crop for 1899, and in reference to Mr. C. H. Clayton's letter on page 184, where he says, "We shall make nothing this year." I feel in justice to Southern California to say that it will be well to let the creature die before you bury her. Now "shall" is a very strong word, and I, for one, think the word "will" would have been much more appropriate, as I consider the present prospects

SWEET CLOVER

And Several Other Clover Seeds.

We have made arrangements so that we can furnish Seed of several of the Clovers by freight or express, at the following prices, cash with the order:

	5lb	10lb	25lb	50lb
Sweet Clover (mellilot).....	60c	\$1.00	\$2.25	\$4.00
Alsike Clover.....	70c	1.25	3.00	5.75
White Clover.....	80c	1.40	3.00	5.00
Alfalfa Clover.....	60c	1.20	2.75	5.00
Crimson Clover.....	55c	.90	2.00	3.50

Prices subject to market changes.

Add 25 cents to your order, for cartage, if wanted by freight.

Your orders are solicited.

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EGGS FROM BARRED PLYMOUTH ROCKS
Thorobred - Fine Plumaged
Fowls—Farm Raised—75 cents
per dozen. **MRS. L. C. AXTELL,**
ROSEVILLE, ILL.

HATCH CHICKENS BY STEAM—with the simple, perfect, self-regulating **EXCELSIOR INCUBATOR**. Thousands in successful operation. Lowest priced 1st-class hatcher made. **GEO. M. STABLE,** 114 to 122 S. 6th St., Quincy, Ill.

44A26t Please mention the Bee Journal.

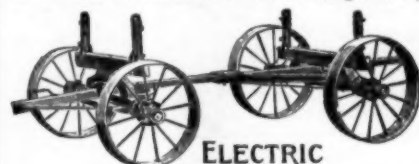
Sent Free Our large Illustrated catalog of Bees, Hives, Smokers, &c Address, **Theodore Bender, Canton, Ohio.** 8Atf Please mention the Bee Journal.

40 PAGE CATALOG BEE-KEEPERS' SUPPLIES, Instructions to Beginners, &c., free. **JOHN NEBEL & SON,** 5Atf HIGH HILL, MISSOURI. Please mention Bee Journal when writing.

SPRAYING with our new patent **KEROSENE SPRAYERS** is simple indeed. Kerosene Emulsion made while pumping. 12 varieties sprayers. Bordeaux and Vermorel Nozzles, the World's Best. **THE DEMING CO., Salem, O.** Western Agents, Henshaw & Hobbs, Chicago. Catalog, formulas free. Please mention Bee Journal when writing.

BUY THE BEST.

If you want the best low down wagon you should buy the Electric Handy Wagon. It is the best because it is made of the best material; the best broad tired Electric Wheels; best seasoned white hickory axles; all other wood parts of the best seasoned white oak. The front and rear hounds are made from the best angle steel,



ELECTRIC

which is neater, stronger, and in every way better than wood. Well painted in red and varnish. Extra length of reach, and extra long standards, supplied without additional cost when requested. This wagon is guaranteed to carry 4,000 pounds anywhere. Write the Electric Wheel Co. Box 16, Quincy, Illinois, for their new catalog, which fully describes this wagon, their famous Electric Wheels and Electric Feed Cookers.

SILVER GRAY—QUEENS—

Golden and 3-banded Italian. Untested, 50c each; tested, 75c. Purity of stock and safe arrival guaranteed.

C. B. BANKSTON, - Rockdale, Texas. 13Atf Please mention the Bee Journal.

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BEE-HIVES AND SECTIONS

ARE MODELS OF PERFECTION.

This is the Verdict of Thousands of Customers and the Acknowledgment of Competitors.

Our unrivaled facilities, coupled with twenty-five years of manufacturing experience, enable us to anticipate and supply every want and need of the bee-keeper, promptly and accurately.

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BEES, HONEY, MONEY

Queens for Business *****
Supplies at Bottom Prices.

"Bee-Keeping for Beginners," price 50 cents, imparts the instruction. Price-List free.

6E8t J. P. H. BROWN, Augusta, Ga.
Please mention Bee Journal when writing.



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in Agricultural Pursuits can't afford to be without the

AGRICULTURAL EPITOMIST.

Sample copy Free to any address upon receipt of name and address plainly written on postal card naming paper in which you saw this ad.

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EGGS FOR SITTING

Pure-bred Barred

Plymouth Rock, 15 Eggs for \$1.00.

Superior Rose Comb Black Bantam Eggs, 15 for \$2.00. No other varieties kept.

Italian-bee keepers being men of good taste and sound judgment should keep the best and most profitable kinds of Poultry. Only fresh eggs used, carefully packed and sent by express. Safe delivery guaranteed. **D. S. HEFFRON,**
WASHINGTON HEIGHTS, ILL. 13Atf

Please mention Bee Journal when writing.



YOUR WIRE FENCE,

whether for pigs, poultry, sheep or cattle, should stand as firm and true in April as it did in February. What kind did you buy?
PAGE WOVEN WIRE FENCE CO., ADRIAN, MICH.

Please mention Bee Journal when writing

good, and if we get the rain which is now threatening, we will not be so nearly "out of sight" as some writers would picture us to be.

As to the extreme losses spoken of by many, I know not of others, but for myself I can say I have 96 colonies in fine condition out of 110 at the close of the season of 1897, and most of my losses, such as they were, were occasioned by my not requeening when they became queenless, as I thought it cheaper to save the combs and hive swarms, or make increase on them when a honey season did come.

I caught only one swarm last year, with possibly five or six lost, and have not fed any at all, and only kept a few from their more wealthy neighbors.

Now, do not come to California to produce honey, but take California for the seasons of 1898 and 1899, and compare with any State in the Union, and see how far we are behind them in proportion.

I am in favor of a consolidation of the Union and the Association.

L. L. ANDREWS.

Riverside Co., Calif., March 26.

Most of the Bees Alive.

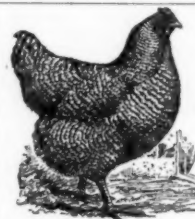
I was afraid I shouldn't see more than half of my bees fly again; but most of them showed up alive to-day. **E. E. HASTY.**

Lucas Co., Ohio, April 10.

What is the Plant?

I have considerable curiosity about a plant that grows here in Washington Co., Fla. The bloom and seed-pods resemble garden-sage, and residents say that it is the same as California sage. If any of the bee-fraternity are familiar with this plant, and will tell us about it, they will confer a favor. The severe freezing of the past winter does not appear to have injured it in the least.

The roots of orange trees that were banked up high with sand, are sprouting up; others



It Costs No More

TO FEED, RAISE AND HOUSE GOOD

Pure-Bred Poultry

than it does common stock, and it pays tenfold better. Send stamp at once for Illustrated Catalog and Poultry-Book.

DREXEL POULTRY YARDS CO.

3611 Fifty-third Avenue, - DREXEL, ILL.
14A3t Please mention the Bee Journal.

WANTED TO BUY A CARLOAD BEES

10-frame Hives and Hoffman Frames preferred.

15Atf **B. WALKER, Evart, Mich.**

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ALBINO QUEENS

If you want the most prolific Queens—If you want the gentlest Bees—If you want the best honey-gatherers you ever saw—try my Albino Queens in April, \$1.00; Tested, \$1.50. 9A26t **J. D. GIVENS, LISBON, TEX.**



Queen-Clipping Device Free....

The MONETTE Queen-Clipping Device is a fine thing for use in catching and clipping Queens' wings. We mail it for 25 cents; or will send it FREE as a premium for sending us ONE NEW subscriber to the Bee Journal for a year at \$1.00; or for \$1.10 we will mail the Bee Journal one year and the Clipping Device. Address, **GEORGE W. YORK & COMPANY,** 118 Michigan St., Chicago, Ill.

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BEST GOODS AT FAIR PRICES.

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For Bee-Keepers' Supplies. We are ready now for the season of 1899 with an immense stock of the latest and best in our line. Send for our 1899 catalog and discounts for early orders.

Address,

JOSEPH NYSEWANDER,

10A8t **DES MOINES, IOWA.**

Please mention Bee Journal when writing.

FOR SALE.

Fifty (50) colonies of ITALIAN BEES in standard Langstroth hives in good condition. Will sell five (5) colonies, or the lot, at \$3.00 per colony. Also one Given Foundation Press, and one Cowan Honey-Extractor. For further particulars inquire of

14A4t **MRS. J. W. LeROY, Rio, Wis.**

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BEES QUEENS
Smokers, Sections,
Comb Foundation
And all Apian Supplies
cheap. Send for
FREE Catalogue. **E. T. FLANAGAN, Belleville, Ill.**

14A4t Please mention the Bee Journal.

2-frame Nucleus with Untested Queen, \$2.25.

Untested Italian Queens, 65 cents each. Ready May 1, 1899. Have orders booked now, and get bees when wanted.

F. J. GUNZEL, Obea, Craighead Co., Ark.

15A4t Please mention the Bee Journal.

—WE WANT—

1,000 New Customers

IN THE NEXT 3 MONTHS.

Give us your address and we will send you special prices, together with our New Catalog.

You will be sure to send us your order when you know what we can do for you.

BEEWAX WANTED.

Standard Lumber Co.

10A4t **MANKATO, MINN.**

Please mention Bee Journal when writing.

BEE-KEEPERS! Let me send you my 64-page CATALOG for 1899.
J. M. Jenkins, Wetumpka, Ala.

Bee-Supplies.

Root's Goods at Root's Prices.

POUNDER'S HONEY-JARS and everything used by bee-keepers. Prompt Service—low freight rate. Catalog free.

WALTER S. POWDER,

512 Mass. Ave.,
INDIANAPOLIS, INDIANA.

are not as yet. Orange-bloom honey will be a scarce product here the coming season. Some beautiful homes that were surrounded with these lovely trees are now nude and bare, and their owners discouraged.

A heavy rain is now falling, and it is to be hoped that it will not be followed by severe drouths similar to those of the two previous years. Rain will cause flowers to bloom, and bees may do better than they have done, even if the early bloom has failed.

MRS. L. HARRISON,

Washington Co., Fla., April 8.

It Pays to Prepare for Winter.

Bees put up in good shape last fall are coming out in good condition, with very few losses; but those not packed and cushioned are just the reverse.

L. O. WESTCOTT,

Saline Co., Nebr., April 10.

No Loss—Look Out for Starvation.

My bees have come thru the winter without loss. But very little honey is left. I am feeding all of them sugar syrup. I would advise all in this part of the country to look out for starvation among their bees, if they are not feeding.

M. S. TEAGUE,

Pike Co., Ind., April 10.

Hive-Entrances in Wintering.

I lost seven colonies out of 36 wintered in the cellar. Those in hives with bottoms similar to the Danzy, with wide sides up, wintered finely. Six of those I lost were in hives with tight bottoms and small entrances, and one had a 3/4-inch dovetailed hive bottom. Those with small entrances got damp, uneasy and moldy, while the others kept dry and clean, and are in excellent condition.

HERMAN L. GLOEGE,

Green Co., Wis., April 13.

In the Midst of Fruit-Bloom.

We are in the midst of fruit-bloom, and a glorious rain. It has rained more or less during the last nine days—over two inches have fallen. Bees are in No. 1 shape.

A. R. GURR,

Merced Co., Calif., March 24.

Bees Wintered Finely.

My bees have wintered finely with a loss of only one colony out of 59.

J. L. GRAY,

Stearns Co., Minn., April 10.

Taking Bees from Winter Quarters.

We expect to get bees out in about a week from this date. I have found three dead colonies out of 150, but expect to find quite a few more when we come to take them out.

WM. RUSSELL,

Hennepin Co., Minn., April 4.

Backward Season.

The season here is very backward. The winter has been so severe that many bees have frozen, thereby leaving many colonies weak.

C. C. PARSONS,

Jefferson Co., Ala., March 23.

Well-Behaved Bees.

Our bees did fairly well last season, considering it was a poor one. They are well-behaved bees, too, seeming instinctively to know their friends, and altho they occasionally give a sting or two, that is what bees of any kind of spunk are expected to do. But, on the whole, they are very gentle, and give no trouble because of savage tendencies. My hives face the east, and all have wintered in single-walled dovetailed 8-frame hives on the summer stands; but I have a shed built over them which is open the whole east front. Around each hive

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Working Wax
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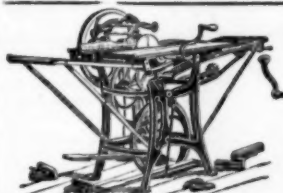
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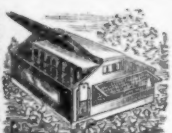
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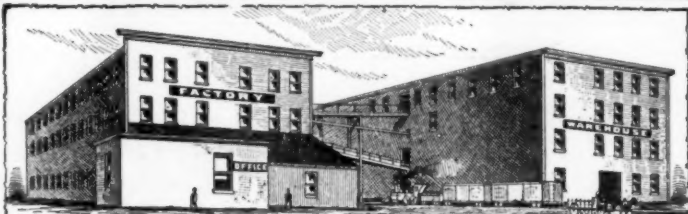
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are pieces of carpet. They have wintered in fine condition, and were out in large numbers one day last week.

We have not had much honey for sale for a year, but our customers have come again after having purchased once, for they say the honey is surely pure.

Mrs. M. B. MARTIN.

Menard Co., Ill., April 8.

Wintered All Right.

I have 35 colonies, which wintered outdoors with only a good covering of paper on the cover, and they get along all right. I have lost but one colony so far, and I am afraid they starved to death. I make my own hives and use the 10-frame Langstroth-Simplicity. I like it better than any other I have tried.

C. H. ANDERSON.

Christian Co., Ky., March 31.

Two-Thirds of the Bees Lost.

We have had a hard winter here. Bees have been dying with the diarrhea on account of the poor honey they gathered last fall. Every one in this locality lost 8 colonies out of 12. A good many bees that are left will spring-dwindle, for when there are no more than a double handful in a hive they surely will dwindle, we all know.

G. RENNERT.

Summit Co., Ohio, March 29.

Bees in Fair to Good Condition.

All's well. It now begins to look like spring, and everybody is hopeful of good times and a good honey-flow. The bees, as a rule, appear to be in from fair to good condition, but my! we have had a terror of a winter for snow. It has buried all records out of sight. There was said to be four times as much as last year. It is now hoped that we may have cool weather with little or no rain, so as to prevent floods.

E. S. LOVESY.

Salt Lake Co., Utah, March 31.

Quite a Loss in Some Apiaries.

My bees seem to have wintered all right. I overhauled a few colonies early in March, and found lots of brood and some young bees, which shows that the queens must have commenced laying in the very coldest weather in February. There is quite a loss of bees in some apiaries. "They froze," they say, but of course they were not packed so as to keep dry.

GEO. SPITLER.

Crawford Co., Pa., April 6.

Wintered Poorly.

Bees wintered poorly in this locality, some losing one-half.

FRANK SNYDER.

Jones Co., Iowa, April 6.



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By the inhalation of Oxygen, the specific cure for all lung troubles. For special information regarding THE OXYGEN TREATMENT, Address, **DR. PEIRO**, Central Music Hall, Chicago.

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Convention Notices.

Illinois.—The Northern Illinois Bee-Keepers' Association will hold two sessions of its spring meeting, one at Mr. John Wagner's, near Beuna Vista, Stephenson Co., under the supervision of the Vice-President; and one at Mr. Oliver Taylor's, at Harlem, Winnebago Co., in charge of the President, on Tuesday, May 16, 1899. Every one is cordially invited. B. KENNEDY, Sec.
New Milford, Ill.

Connecticut.—The annual meeting of the Connecticut Bee-Keepers' Association will be held at the Capitol, at Hartford, May 3, 1899.
Waterbury, Conn. Mrs. W. E. RILEY, Sec.

CHAS. F. MUTH & SON.

I wish to announce to my friends and patrons that I have this day sold to C. H. W. WEBER, of Cincinnati, my Honey and Bee-Keepers' Supply business, known for the past 38 years as CHAS. F. MUTH & SON. Mr. Weber will continue to push the Langstroth hive and everything pertaining to same; besides, he has secured the agency for Mr. Root's goods, and will sell them at his prices. I beg the customers of the old house, to whom I wish to extend my thanks, to continue their patronage with Mr. Weber, by whom I am sure they will be accorded fair and honest treatment.

MRS. ANNIE MUTH (Widow.)
Cincinnati, Ohio, April 7, 1899. 15Atf

26 cents Cash paid for Beeswax.

This is a good time to send in your Beeswax. We are paying 26 cents a pound—CASH—upon its receipt. Now, if you want the money PROMPTLY, send us your Beeswax. Impure wax not taken at any price. Address as follows, very plainly,

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Smoke Engine (largest smoker made) 4-in. stove.	Doz. \$13.00; each, by mail, \$1.50
Doctor.....3 1/2 in. stove.	Doz. 9.00; " 1.10
Conqueror.....3 in. stove.	Doz. 6.50; " 1.00
Large.....2 1/2 in. stove.	Doz. 5.00; " .90
Plain.....2 in. stove.	Doz. 4.75; " .70
Little Wonder (weight 10 ounces).....2 in. stove.	Doz. 4.50; " .60
Honey-Knife.....	Doz. 6.00; " .80

Bingham Smokers have all the new improvements. Before buying a Smoker or Knife, look up its record and pedigree.

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Dear Sir:—Have used the Conqueror 15 years. I was always pleased with its workings, but thinking I would need a new one this summer, I write for a circular. I do not think the 4-inch Smoke Engine too large.
January 27, 1897. Truly, W. H. EAGERTY, Cuba, Kansas.

T. F. BINGHAM, Farwell, Michigan.

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HONEY AND BEESWAX MARKET QUOTATIONS.

CHICAGO, April 8.—Choice grades of white, 12@13c; travel-stained and light amber, 10@11c; buckwheat and dark, 7@8c. Extracted, white, 7@8c; amber, 6@7c; dark amber, 5@6c. Beeswax, 26c.

Stocks of white comb honey are about exhausted, and this is as it should be if a market is to be had for the expected large flow of nectar from the season of 1899. R. A. BURNETT & Co.

DETROIT, April 10.—Fancy white, 12c; No. 1, 10@11c; dark and amber, 8@9c. Extracted in fair demand without change in price. Beeswax, 25@26 1/2c.

Decreasing demand and the attempt to crowd sales have forced down prices on comb honey. M. H. HUNT.

NEW YORK, March 8.—Fancy white, 12c; No. 1 white, 10@11c; amber, 9c; buckwheat and dark, 6@7c. Comb honey is pretty well cleaned up now and we expect to dispose of the balance of our stock during this month. Excepting California there is not much stock of extracted on our market. Demand is fair at unchanged quotations. Beeswax, 27@28c.

HILDRETH BROS. & SEGELKEN.

SAN FRANCISCO, April 5.—White comb, 10@10 1/2c; amber, 7 1/2@9c. Extracted, white, 7 1/2@7 3/4c; light amber, 6 1/2@7c. Beeswax, 26 1/2@27c.

Beyond a small jobbing trade, mainly out of supplies in second hands, there is nothing to record in the way of business. There are only moderate supplies, and these are mainly comb. Values are steady. It is too early to get definite information concerning coming crop, but it is not likely to prove large in this State.

BOSTON, April 1.—Fancy white, 13c; A No. 1, 12@12 1/2c; No. 1, 11@12c; No. 2, 9@10c; demand fair; no call for dark. Extracted, supply very light, good demand. White in 60-pound cans, 7 1/2c; light amber in barrels, 7c. Beeswax, very light stock, good demand, 29c.

BLAKE, SCOTT & LEE.

KANSAS CITY, April 6.—Fancy white comb honey continues in good demand at 13 1/2@14c; choice white at 12 1/2@13c; dark, 10 1/2@11 1/2c. Extracted scarce at 6 1/2c. PEYCKE BROS.

CLEVELAND, March 9.—Fancy white, 13@14c; No. 1 white, 12@13c; A No. 1 amber, 10@11c; No. 2 amber, 9@10c; buckwheat, 8c. Extracted, white, 7c; amber, 6c; buckwheat, 5c.

A. B. WILLIAMS & Co.

BUFFALO, April 1.—Little or no strictly fancy one-pound comb honey here. It would sell well at about 11@12c. Few lots of common, dark, etc., arriving, and sell at 7@8c mostly; some very poor at 6c. There is no extracted here; worth from 4 1/2@5 1/2c; extra fancy, 6c. Fancy pure beeswax, 30@32c; poor, 25@28c.

BATTERSON & Co.

OMAHA, April 1.—Fancy white quotable at 13@13 1/2c; choice, 12@12 1/2c. Extracted, 6 1/2c.

Quotations are practically nominal, as there is no stock left now in receivers hands, and dealers have also but very little left. There will not be a pound of any kind of honey carried over in this market. PEYCKE BROS.

MILWAUKEE, March 2.—Fancy 1-lb. sections, 13@14c; A No. 1, 12@12 1/2c; No. 1, 11@12c; dark or amber or old, 7@10c. Extracted, in barrels or kegs, white, 7@7 1/2c; dark, 5 1/2@6 1/2c. Beeswax, 25@27c.

Since our last report we have had a very good market for honey, and the demand has been very good for all grades, especially for sections of the best quality, and the demand is good now and small supply. We encourage shipments of best comb. Extracted, fair demand.

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3 Tested Queens 3.50
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7A13t

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